Diagnostic Images

Pseudotumour of the scapula

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The patient

A 33 year old woman complained of right scapular pain and swelling over the trapezius insertion at the scapula. There appeared to be a bony lump at the medial aspect of the superior scapula. Plain films, computed tomography (CT) and fluoroscopy were performed for elucidation (Figures 1–5).

Comment

Further questioning then elicited a history of a previous lymph node biopsy in this region when in all probability the right accessory nerve was inadvertently transected as it lies superficially and close to the lymph nodes of the posterior triangle of the neck. The 'subdermal ridge' (Figure 4) is the scar of the biopsy incision.

The initial difficulty in recognizing the abnormality was in accepting the history of the recent appearance of a lump and the failure to elicit the past history of a lymph node biopsy. Hard masses in the region of the scapula, bony, should be demonstrable on plain films but cartilagenous tumours such as exophytic chondromas can be radiolucent although there is usually some irregularity of the bone margin at the site of origin. CT clearly demonstrated the muscle wasting and skin nodule and by self palpation under fluoroscopy the nature of the 'lump' was identified, being a normal though 'wing' scapula.

Figure 1 Frontal view of shoulder including scapula. No abnormality was visible and in particular no indication of the possibility of an osteoma or osteochondroma.

Figure 2 Oblique scapular view again demonstrating a normal scapula and in particular the medial superior angle (arrow).

Figure 3 CT section through the lower neck and upper arms with arms positioned above the head. There is severe wasting of the right trapezius with only a thin fibrous strand remaining (small arrows) and a small skin 'nodule' attached to a dimple in the skin. 1 – M. trapezius; 2 – M. splenius capitis; 3 – M. semispinalis capitis; 4 – M. levator scapulae; 5 – M. sternocleidomastoid; 6 – M. longus colli; 7 – M. scalenus anticus; 8 – M. scalenus posticus; 9 – Thyroid gland; T – Trachea.

Figure 4 A section 1 cm higher shows similar appearances indicating that the 'nodule' is in fact a thin subdermal ridge (large arrow). For key, see Figure 3. Note that the thyroid gland has a higher attenuation than the surrounding tissue due to the iodine content.

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Figure 5 Fluoroscopy film with the tip of the patient's index finger (arrow) pointing to the palpable 'lump', shown to be the medial angle of the scapula (S).